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L46 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:594995 HCAPLUS

DOCUMENT NUMBER: 137:151106

TITLE: Fibronectin or fibrinogen binding proteins and

iron-restricted induced genes of Streptococcus suis and their use in diagnosis and vaccination against

Streptococcal infections

INVENTOR(S): Smith, Hilda Elizabeth

PATENT ASSIGNEE(S): Id-Lelystad, Instituut Voor Dierhouderij En

Diergezondheid B.V., Neth. PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

SOURCE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Pi	PATENT NO.				KIND DATE				APPLICATION NO.					DATE				
W	2002061070 2002061070 2002061070							WO 2002-NL73					20020131					
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AB The invention relates to the field of diagnosis of and vaccination against Streptococcal infections and to the detection of virulence markers of Streptococci. The invention provides a method for modulating virulence of a Streptococcus comprising modifying a genomic fragment of said Streptococcus wherein said genomic fragment comprises at least a functional part of a fragment identifiable by hybridization in Streptococcus suis to a nucleic acid or fragment thereof. The virulence genes of the present invention include iron-restricted induced (iri) genes and in vivo selected (ivs) genes of Streptococcus suis infected pigs. In a preferred embodiment the said gene encodes a fibronectin/fibrinogen binding protein (FBPS). Eighteen unique iron-restricted induced genes and 22 unique in vivo selected genes of S. suis were found in piglets. FBPS gene was cloned, the protein was purified and shown to bind human fibronectin and fibrinogen.

L46 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:364057 HCAPLUS

DOCUMENT NUMBER: 136:351405

TITLE: Protein and DNA sequences of virulence related proteins of Streptococcus suis and uses as vaccine

INVENTOR(S): Smith, Hilda Elizabeth

PATENT ASSIGNEE(S): Id-Lelystad, Instituut Voor Dierhouderij En

Diergezondheid B.V., Neth. Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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SOURCE:

	PATENT NO.					KIND DATE			APPLICATION NO.					DATE				
	EP	1205	552			A1	_	2002	0515							2	0001	109
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	WO	2002	0385	97		A2		2002	0516		WO 2	001-	NL80	5		2	0011	106
	WO	2002	0385	97		A3		2002	8080									
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AB The present invention relates to the field of diagnosis of and vaccination against Streptococcal infections and sequences of the virulence markers as well as the detection of virulence markers of streptococcus suis. The invention provides a method for modulating virulence of a Streptococcus comprising modifying a genomic fragment of said Streptococcus wherein said genomic fragment comprises at least a functional part of a fragment identifiable by hybridization in Streptococcus suis to a nucleic acid or fragment disclosed in this invention. The invention also relates to vectors comprising the disclosed DNA sequences, host cell containing the vectors, antibodies against the proteins encoded by the DNA sequences, and vaccine comprising the disclosed proteins.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:84998 HCAPLUS

DOCUMENT NUMBER: 132:147623

TITLE: Sequences of Streptococcus suis capsular (cps) gene cluster, and uses thereof in vaccines and diagnostic

tests

INVENTOR(S): Smith, Hilda Elizabeth

PATENT ASSIGNEE(S): Stichting Dienst Landbouwkundig Onderzoek, Neth.

SOURCE: PCT Int. Appl., 144 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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		GH, ES, CI,	FI, CM,	KE, FR, GA,	LS, GB, GN,	GR,	SD, IE, ML,	IT, MR,	LU, NE,	MC, SN,	NL, TD,	PT, TG	SE,	BF,	ВJ,	CF,	CG,
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AB The invention provides an isolated or recombinant nucleic acid encoding a capsular (cps) gene cluster of Streptococcus suis or a gene or gene fragment derived thereof. Most of the genes belong to a single transcriptional unit, and they and the enzymes and proteins which they encode act in concert to provide the capsule with the relevant polysaccharides. Thus, the invention provides cps genes and proteins involved in the regulation (cpsA), chain length determination (cpsB, cpsC), export

(cpsC), and biosynthesis (cpsE, cpsF, cpsG, cpsH, cpsJ, cpsK) of capsular polysaccharides. The invention further relates to Streptococcus suis infections of pigs, to vaccines directed against those infections and to tests for diagnosing Streptococcus suis infections. The invention also provides a nucleic acid probe or primer allowing species or serotype specific detection of Streptococcus suis.

L46 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:95578 HCAPLUS

DOCUMENT NUMBER: 118:95578

TITLE: DNA sequences for discrimination between virulent and

nonvirulent Streptococcus suis type II and for

preparation of vaccines

INVENTOR(S): Smith, Hilda Elizabeth; Vecht, Uri

PATENT ASSIGNEE(S): Centraal Diergeneeskundig Instituut, Neth.

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9216630	A1	19921001	WO 1992-NL54	19920319

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W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP,
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         RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN,
             GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG
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PRIORITY APPLN. INFO.:
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                                            WO 1992-NL54
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AB A gene for a 90-120 kDa extracellular protein factor (I) or a higher mol. weight protein containing I, and a gene for a 135-136 kDa muramidase-released protein are cloned from pathogenic and/or non-pathogenic Streptococcus suis type II. The DNA sequences or the antibodies to the proteins can be used for detection of pathogenic S. suis by PCR or immunoassay, and the proteins can be used as vaccines to protect mammals including swine and human from infection by Streptococcus suis type II. Cloning procedures, preparation of poly- and monoclonal antibodies to the proteins for ELISA, and oligonucleotide probes for PCR were also disclosed.